

Setting up Entire System Server Components

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Steps Overview

Setting up Entire System Server on Windows NT consists of the following steps:

Activity	Remarks
Read the README file.	Mandatory
Customize Entire Broker.	Mandatory if the application using the Entire Broker (for example: SYSEOR) is on another machine than the NPR server.
Customize Windows NT Registry settings.	Mandatory
Customize the NPR server.	Mandatory
Start work with Entire System Server.	Optional

Step 1: Read the README File

Access the **%NPRDIR%\%NPRVERS%** directory and read the **README.1ST** file for any version-specific installation considerations concerning the particular platform.

Step 2 Customize Entire Broker

The following definitions must be included in the Entire Broker attribute file:

```
DEFAULTS=SERVICE
TRANSLATION=SAGTCHA
SERVER=<nodename>
CLASS=NPR
SERVICE=<npr identifier>
```

where:

Default	Description
<nodename>	is the identification of the node where the server is active.
<npr identifier>	is the identification of the service name provided for the NPR server.

Repeat these definitions for every NPR server specified in the **npr.ini** file. For instance, if an NPR server is available in the **HP001** node with the service name **nprdemo**, the following definitions must be created:

```
DEFAULTS=SERVICE
TRANSLATION=SAGTCHA
SERVER=HP001
CLASS=NPR
SERVICE=nprdemo
```

For installation of the Entire Broker, see the latest documentation (Version 2.1.1 or above for mainframe platforms and Windows NT).

Note for mainframe platforms:

If you are running the OS/390 operating system, you might as well use the Broker that comes integrated in the EntireX Version 4.1.1 or above.

Step 3: Customize the NPR Server

- [DEFAULTS] Section Settings
- [<npr identifier>] section settings

The information contained in the **npr.ini** file is used to define the behavior of the server processes.

The **npr.ini** file is structured in one or more sections: the [DEFAULTS] section and the [<npr identifier>] sections.

[DEFAULTS] Section Settings

The [DEFAULTS] section contains default values that apply to all servers, except when a specific section for the server is created. In this case, the values defined in the [<npr identifier>] section override the values defined in the [DEFAULTS] section. You must define an item in the [<npr identifier>] section only when the value is different from the value defined in the [DEFAULTS] section.

Local_Node=<node name>

Default	Description
None	Default local node name.

Integration_mechanism=ETB,<broker id>

Default	Description
None	Default integration mechanism. This item identifies the integration mechanism for establishing the communication between the client and the NPR server. Currently, only Entire Broker is supported as integration mechanism.

ETB_Wait=<seconds>

Default	Description
30	Default Entire Broker timeout.

ETB_Replica={yes|no}

Default	Description
No	Default replica server option. Currently not supported.

Log_File_Prefix=<string>

Default	Description
Default	Default global log file prefix. This item identifies the prefix of the global log file that will be generated in the %NPRDIR%\%NPRVERS%\work directory.

Trace_Level=<number>

Default	Description
10	Default trace level for server's log file. Currently not supported.

Trace_File_Prefix=<string>

Default	Description
Trace	Default global trace file prefix. This item identifies the prefix of the global trace file that will be generated in the %NPRDIR%\%NPRVERS%\work directory.

Command_Log_Level=<number>

Default	Description	Possible Values
0	Sets different levels of NPR command logging.	0 no command logging 1 log after NPR call 2 log before and after NPR call 3 log before and after NPR call plus Entire Broker error code logging

[<npr identifier>] section settings

The [<npr identifier>] sections are optional and can be created or modified later. They are used to define items specific to a certain server when these are different from default. Any item defined in the [DEFAULTS] section can also be defined for each [<npr identifier>] section.

Any item defined in the [DEFAULTS] section can also be defined for each [<npr identifier>] section. If an item is not defined in this section, it is taken from the [DEFAULTS] section.

Important:

This <npr identifier> must be defined in a Windows NT Registry entry as well. See below, Step 4: Adapt the Windows NT Registry.

Example: npr.ini File

```
; Entire System Server
; Version 2.1.1 PL 0
; (C) 2001, Software AG
; Entire System Server INI file
; This file has been customized during the installation process, but it is
; possible to modify this information at any time using any text editor
; available on the system.

[DEFAULTS]
Local_node=<node name>
Integration_Mechanism=ETB,<ETB id>
ETB_Wait=30
ETB_Replica=no
Log_File_Prefix=default
Trace_Level=0
Trace_File_Prefix=trdef
Command_Log_Level=0
IPC_Prefix=aaaa
Administrator=sag

[npr_nt]
Local_node=<node name>
Integration_Mechanism=ETB,<ETB id>
ETB_Wait=30
ETB_Replica=no
Log_File_Prefix=npr
Trace_Level=0
Trace_File_Prefix=trace
Command_Log_Level=0
```

Step 4: Adapt the Windows NT Registry

For this step, the Windows NT utility **regedit.exe** or **regedt32.exe** must be used.

For Entire System Server (Standard)

Navigate through the registry to the following entry:

```
[HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\NPR\Parameters]
```

For Entire System Server (with R/3)

Navigate through the registry to the following entry:

```
[HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\NPR R3\Parameters]
```

Adapt the string in the field NPR Service to the <npr identifier> you want to use. This <npr identifier> must appear as header in the **npr.ini** file as well. The default NPR Service name is **npr_nt**.

Step 5: Start Work with Entire System Server

The **npreth.exe** or **npretbr3.exe** module is the Operating System Server for Entire Operations. It can receive remote requests from clients using the Entire Broker mechanism. The server executes the system functions by calling the adequate function in the dynamic library **nprlib.dll** or **nprlibr3.dll**.

The characteristics of the client/server communication established through the Entire Broker mechanism are as follows:

- Connection-less oriented mode;
- Broker class always equal to **NPR**;
- User identifier always equal to **NPR_ETBS**;
- Service name always equal to **<npr identifier>**;
- Default internal timeout value equal to **30** seconds;
- Default internal replica value equal to **YES**. This characteristic relative to replica servers is not implemented in the current version.

The **npr.ini** file defines the attributes related to an NPR server.